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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,465	02/05/2004	Hiroki Kanai	501.43494X00	2954

7590 03/21/2007

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EXAMINER	
BRADLEY, MATTHEW A	
ART UNIT	PAPER NUMBER
2187	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/771,465	KANAI, HIROKI	
	Examiner	Art Unit	
	Matthew Bradley	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6,7,13 and 14* is/are allowed.

6)☒ Claim(s) *1-5 and 8-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This Office Action has been issued in response to amendment filed 18 December 2006. Applicant's arguments have been carefully and fully considered but they are not persuasive. Accordingly, this action has been made FINAL.

Claim Status

Claims 1-14 remain pending and are ready for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1-5** and **8-12** are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Sanada et al (U.S. 6,484,245), hereinafter referred to as Sanada.

As per independent claims **1** and **8**, Sanada teach,

- a storage controller for controlling the storage system; (Figure 1 item 40 as taught in Column 4 lines 58-65)

- and at least one disk device for storing data from said storage controller, (Figure 1 item 50 as taught in Column 5 lines 9-14)
- wherein said storage controller comprises:a channel controller for receiving a file access input/output (I/O) request based on file-name indication from an information processing device through a network, transmitting/receiving data to/from the information processing device and outputting a block access I/O request corresponding to the file access I/O request; (Figure 1 item 41 as taught in Column 4 line 58 to Column 5 line 8)
- a disk controller for carrying out input/output control of data stored in a storage volume for storing the data based on the block access I/O request output by said channel controller; (Figure 1 item 46 as taught in Column 5 lines 4-7)
- a first memory including a cache memory for temporarily storing the data delivered between the channel controller and the disk controller; and (Figure 1 item 45 as taught in Column 5 lines 2-3)
- a data transfer network connected to said channel controller, said disk controller and said first memory, (Figure 1 shown as the interconnections between items 44-46)
- wherein the channel controller is equipped with a first processor for outputting the block access I/O request corresponding to the file access I/O request and controlling the first memory, (Figure 1 item 44 as taught in

Column 5 lines 1-8) *The Examiner notes that the channel controller, item 41 as taught by Sanada, is equipped with a first processor, item 44, in that the channel controller is equipped to access the first processor.*

- a file access circuit which has a second processor and a second memory controlled by the second processor and serves to control the transmission/reception of the file access I/O request and the data sent from the information processing device (Figure 1 item 42 'processor' and Figure 1 item 43 'memory' as taught in Column 4 lines 64-67),
- a data transfer device for controlling data transfer between the first memory and the second memory, (Column 6 lines 1-13)
- and a third memory controlled by the first processor, (Figure 1 item 47 as taught in Column 5 lines 1-8)
- which are formed on a circuit module, and, *The Examiner notes that as file servers are being taught by Sanada, it is inherent that the individual server components are formed on a circuit module.*
- wherein the second processor transmits information indicating the storage position of the data in the second memory to the first processor, (Column 5 lines 48-51)
- the first processor writes into the third memory data transfer information containing information indicating the storage position of the data in the first memory and information indicating the storage position of the data in the second memory, (Column 5 lines 1-8)

- and the data transfer device reads out the data transfer information from the third memory and controls the data transfer between the first memory and the second memory on the basis of the data transfer information thus read out (Column 5 lines 45-51).

As per independent claims **2** and **9**, Sanada teach,

- *The Examiner notes that independent claim 2 adds the following limitation to independent claim 1:*
  - transmits the storage position of the data transfer information in the third memory to the data transfer device, (Column 5 lines 5-8 and Column 5 lines 45-51)
- *The remaining limitations of claim 2 are rejected on the same grounds of rejection as independent claim 1.*

As per independent claims **3** and **10**, Sanada teach,

- *The Examiner notes that independent claim 3 adds the following limitation to independent claim 1:*
  - wherein the first processor writes into the third memory first data transfer information containing information indicating the storage position of the data in the first memory, (Column 5 lines 5-8)
  - the second processor writes into the second memory second data transfer information containing information indicating the storage position of the data in the second memory, (Column 5 lines 48-51)

- and the data transfer device reads out the second data transfer information from the second memory, reads out the first data transfer information from the third memory, and controls the data transfer between the first memory and the second memory based on the first data transfer information and the second data transfer information (Column 5 lines 45-51).

The remaining limitations of claim 3 are rejected on the same grounds of rejection as independent claim 1.

As per independent claims **4** and **11**, Sanada teach,

- *The Examiner notes that independent claim 4 adds the following limitation to independent claim 1:*
  - and wherein the first processor writes into the third memory first data transfer information containing information indicating the storage position of the data in the first memory, the second processor writes into the second memory second data transfer information containing information indicating the storage position of the data in the second memory, (Column 5 lines 45-51)
  - the second processor transmits information indicating the storage position of the second data transfer information to the first processor, the first processor transmits to the data transfer device transfer start information containing information indicating the storage position of the first data transfer information and information indicating the storage

position of the second data transfer information, (Use of item 47 Figure 1 as taught in Column 5 lines 45-51)

- and the data transfer device reads out the second data transfer information from the second memory based on the transfer start information, reads out the first data transfer from the third memory on the basis of the transfer start information, and controls the data transfer between the first memory and the second memory based on the first data transfer information and the second data transfer information (Column 5 lines 45-51).

The remaining limitations of claim 4 are rejected on the same grounds of rejection as independent claim 1.

As per dependent claims **5** and **12**, Sanada teach, wherein the data transfer device writes into the third memory information indicating the result of the data transfer carried out between the first memory and the second memory (Column 6 lines 11-13).

Allowable Subject Matter

Claims **6-7** and **13-14** are allowed.

Response to Arguments

Applicant's arguments filed 18 December 2006 have been carefully and fully considered but are moot in view of the new ground(s) of rejection as necessitated by amendment.

With respect to applicant's arguments drawn to claims 1-5 and 8-12, the Examiner respectfully disagrees and refers applicants to the rejection supra and comments made supra with respect to the usage of Sanada.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Bradley whose telephone number is (571) 272-8575. The examiner can normally be reached on 6:30-3:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks can be reached on (571) 272-4201. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRP/mb

Brian R. Peugh
Primary Examiner

3/6/07